

CAD REF. VPBA01-0

DATE 01.06.11 SCALE N/A

LOADING CASES

A = 0.36 kN/m

B = 0.75 kN/m

(0.5kN infill load shared by two balusters)

AS/NZS 1170.1 TABLE 3.3

TYPE OF OCCUPANCY FOR PART OF THE BUILDING OR STRUCTURE	SPECIFIC USE	COMPLIANT	LOADING CASE
A Domestic and residential activities	All areas within or serving exclusively one dwelling including stairs, landings etc but excluding external balconies and edges of roofs (see C3)	YES	А
	Other residential, (see also C)	YES	В
B, E Offices and work areas not included elsewhere including storage areas	Light access stairs and gangways not more than 600mm wide	YES	А
	Fixed platforms, walkways, stairways and ladders for access	YES	А
	Areas not susceptible to overcrowding in office and institutional buildings also industrial and storage buildings	YES	В

C Areas where people may congregate

C1/C2 Areas with tables or fixed seating	Areas with fixed seating adjacent to a balustrade, restaurants, bars etc	NO	-
C3 Areas without obstacles for moving people and not susceptible to over-crowding	Stairs, landings, external balconies, edge of roofs etc	YES	В
C5 Areas susceptible to over-crowding	Theatres,cinemas,grandstands,discoteques, bars,auditoria,shopping malls etc	NO	-
D Retail areas	All retail areas including public areas of banks/building societies, (see C5 for areas here over-crowding may occur)	NO	-

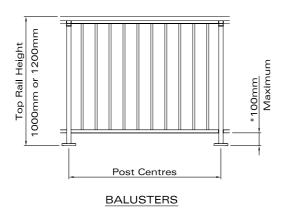


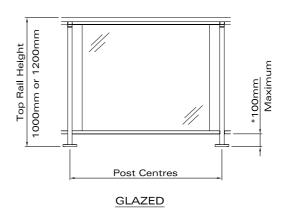
PROFILE BALUSTRADE AS/NZS 1170.1 COMPLIANCE SPECIFICATIONS

TYPE 1 BALUSTRADE

CAD REF. VPBA02-0

DATE 01.06.11 SCALE NTS





Type 1 Balustrade

*Distance is from the bottom of the bottom rail to the lowest point on the floor level.

Maximum baluster length is 1075mm

POST CENTRES TABLE						
HEIGHT OF TOP RAIL		1000mm		1200mm		
TOP RAIL		ELLIPTICAL OR ROUND		ELLIPTICAL OR ROUND		
BOTTOM RAIL		01966 or 01951	01964	01966 or 01951	01964	
LIVE LOAD (Refer P1.2.1)	CASE A	1400mm	1650mm	1400mm	1650mm	
	CASE B	1370mm	1530mm	1370mm	1530mm	
WIND CASE (Use for glazed balustrades only)	LOW	1800mm	1800mm	1800mm	1800mm	
	MEDIUM	1780mm	1750mm	1690mm	1660mm	
			1560mm	1220mm	1220mm	
	VERY HIGH	1340mm	1340mm	940mm	940mm	

Choose <u>minimum</u> post centres from wind and live load case which applies to the situation

Example 1 : Internal Balustrade

1200mm Height Top Rail 01964 Bottom Rail (Wind does not apply)

Live Load Case B = 1530mm Post Centres - Use 1530mm Post Centres

Example 2 : External Balustrade 1000mm Height Top Rail 01951 Bottom Rail Very High Wind

Live Load Case B = 1370mm Post Centres

Wind Load Case = $\overline{1340\text{mm}}$ Post Centres - Use $\underline{1340\text{mm}}$ Post Centres

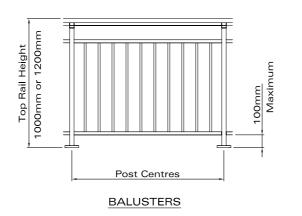


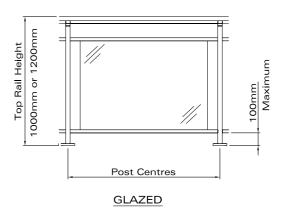
PROFILE BALUSTRADE **AS/NZS 1170.1 COMPLIANCE SPECIFICATIONS**

TYPE 2 BALUSTRADE

CAD REF. VPBA03-0

DATE 01.06.11 **SCALE** NTS





Type 2 Balustrade

*Distance is from the bottom of the bottom rail to the lowest point on the floor level.

Maximum baluster length is 1075mm

POST CENTRES TABLE						
HEIGHT OF TOP RAIL		1000)mm	1200mm		
TOP RAIL		ELLIPTICAL	OR ROUND	ELLIPTICAL OR ROUND		
INFILL RAILS	6	Both 01951 or 01966	At least one 01964	Both 01951 At least one or 01966 01964		
LIVE LOAD (Refer P1.2.1)	CASE A	1120mm	1120mm	1120mm	1120mm	
	CASE B	1120mm	1120mm	1120mm	1120mm	
WIND CASE (Use for glazed balustrades only)	LOW	1800mm	1800mm	1800mm	1800mm	
			1800mm	1770mm	1720mm	
	HIGH	1670mm	1630mm	1450mm	1450mm	
	VERY HIGH	1540mm	1490mm	1120mm	1120mm	

Choose minimum post centres from wind and live load case which applies to the situation

Example 1 : Internal Balustrade

1200mm Height Top Rail 01964 Infill Rail (Wind does not apply)

Live Load Case B = $\underline{1120mm}$ Post Centres - Use $\underline{1120mm}$ Post Centres

Example 2: External Balustrade 1000mm Height Top Rail 01964 Infill Rail

Very High Wind

Live Load Case B = 1120mm Post Centres

Wind Load Case = 1490mm Post Centres - Use 1120mm Post Centres

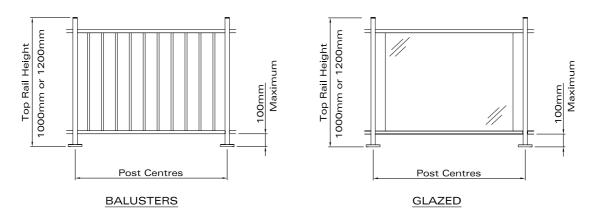


PROFILE BALUSTRADE AS/NZS 1170.1 COMPLIANCE SPECIFICATIONS

TYPE 3 BALUSTRADE

CAD REF. VPBA04-0

DATE 01.06.11 SCALE NTS



Type 3 Balustrade

*Distance is from the bottom of the bottom rail to the lowest point on the floor level.

Maximum baluster length is 1075mm

POST CENTRES TABLE							
HEIGHT OF	TOP RAIL	RAIL 1000mm		1200mm			
TOP RAIL		01951 01951 01964		01964	01951	01951 01964	01964
BOTTOM RA	ИL	01951	01964 01951	01964	01951	01964 01951	01964
LIVE LOAD (Refer P1.2.1)	CASE A	1110mm	1420mm	1620mm	1110mm	1420mm	1620mm
	CASE B	1110mm	1380mm	1500mm	1110mm	1380mm	1500mm
WIND CASE (Use for glazed balustrades only)	LOW	1800mm	1800mm	1800mm	1800mm	1800mm	1800mm
	MEDIUM	1770mm	1750mm	1720mm	1660mm	1660mm	1630mm
	HIGH	1570mm	1560mm	1530mm	1220mm	1220mm	1220mm
	VERY HIGH	1340mm	1340mm	1340mm	940mm	940mm	940mm

Choose <u>minimum</u> post centres from wind and live load case which applies to the situation

Example 1: Internal Balustrade

1200mm Height Top Rail 01964 Top Rail 01951 Bottom Rail

(Wind does not apply)

Live Load Case B = 1380mm Post Centres - Use 1380mm Post Centres

Example 2: External Balustrade

1000mm Height Top Rail

01964 Top Rail 01964 Bottom Rail Very High Wind

Live Load Case B = 1500mm Post Centres

Wind Load Case = $\overline{1340mm}$ Post Centres - Use 1340mm Post Centres